

## CLAIMS

What is claimed is:

1. An image processing system comprising:

a position information apparatus, having a communication interface  
5 connected in series with a transmission line, for obtaining a detection  
position of a control subject and outputting a position-detection signal;

an image processing apparatus, having a communication interface  
connected in series with the transmission line and a storage means that  
stores the position-detection signal, for capturing an image of a subject and  
10 generating an image-processing signal based on image processing; and

a master apparatus for implementing communication control of the  
image processing apparatus and the position control apparatus, wherein the  
image processing apparatus starts the image processing, in accordance with  
an in-bound start command, stores in the storage means the  
15 position-detection signal, and outputs to the master apparatus the  
position-detection signal along with the image-processing signal.

2. The image processing system according to claim 1, wherein the image  
processing apparatus synthesizes the position-detection signal with the  
20 image-processing signal and outputs the synthesized signal to the master  
apparatus.

3. The image processing system according to claim 1 or 2, wherein the image  
processing apparatus obtains as a first corrected position signal the position,  
25 of the control subject, at the time when the start command is issued, by,

based on the amount of change in the position-detection signal and an update period for the position-detection signal, correcting the position-detection signal.

5 4. The image processing system according to claim 1 or 2, wherein the image processing apparatus obtains as a second corrected position signal the position, of the control subject, at the time when the start command is issued, by, based on the update period, in the transmission line, for the position-detection signal, correcting the position-detection signal.

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5. The image processing system according to claim 1 or 2, wherein an ID code or an output-delay-time value for the position-detection signal is provided to the position information apparatus, and the image processing apparatus obtains as a third corrected position signal the position, of the control subject, at the time when the start command is issued, by, based on the ID code or the output-delay-time value, correcting the position-detection signal.

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6. The image processing system according to claim 1 or 2, wherein, by, through computing, obtaining a communication delay time of the transmission line and an output delay time of the position-detection signal and, by way of the transmission line, setting in the storage means of the image processing apparatus the communication delay time and the output delay time, thereby correcting the position-detection signal, the master apparatus obtains as a fourth corrected position signal the position, of the

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